

INTERNATIONAL SEARCH REPORT

Internat	Application No
PCT/DE 03/00964	

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L23/522

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT
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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 99163 A (KONINKL PHILIPS ELECTRONICS NV) 27 December 2001 (2001-12-27) figure 2 —	1-20
X	US 6 037 621 A (WILSON WILLIAM BURDETT) 14 March 2000 (2000-03-14) the whole document —	1-20
X	DE 100 46 910 A (MITSUBISHI ELECTRIC CORP) 10 May 2001 (2001-05-10) the whole document —	1-20
X	US 5 583 359 A (NG ANTHONY C C ET AL) 10 December 1996 (1996-12-10) cited in the application the whole document — —/—	1-20

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

5 September 2003

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18/09/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01 91144 A (CONEXANT SYSTEMS INC) 29 November 2001 (2001-11-29) the whole document ----	
A	DE 198 50 915 C (BOSCH GMBH ROBERT) 23 March 2000 (2000-03-23) cited in the application the whole document ----	
A	US 5 208 725 A (AKCASU OSMAN E) 4 May 1993 (1993-05-04) cited in the application the whole document ----	
A	APARICIO R ET AL: "Capacity limits and matching properties of integrated capacitors" PROCEEDINGS OF THE IEEE 2001 CUSTOM INTEGRATED CIRCUITS CONFERENCE, SAN DIEGO, CA, USA, 6-9 MAY 2001, vol. 37, no. 3, pages 384-393, XP002252607 IEEE Journal of Solid-State Circuits, March 2002, IEEE, USA ISSN: 0018-9200 cited in the application the whole document -----	
A	US 6 297 524 B1 (SOWLATI TIRDAD ET AL) 2 October 2001 (2001-10-02) the whole document -----	

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No
PCT/DE 03/00964

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 0199163	A	27-12-2001	US WO EP	6570210 B1 0199163 A2 1228527 A2	27-05-2003 27-12-2001 07-08-2002
US 6037621	A	14-03-2000		NONE	
DE 10046910	A	10-05-2001	JP DE TW US	2001127247 A 10046910 A1 461075 B 6465832 B1	11-05-2001 10-05-2001 21-10-2001 15-10-2002
US 5583359	A	10-12-1996	CA WO DE DE EP JP	2214123 A1 9627907 A1 69621011 D1 69621011 T2 0813752 A1 11501159 T	12-09-1996 12-09-1996 06-06-2002 27-02-2003 29-12-1997 26-01-1999
WO 0191144	A	29-11-2001	US AU WO	6411492 B1 6347801 A 0191144 A1	25-06-2002 03-12-2001 29-11-2001
DE 19850915	C	23-03-2000	DE WO EP US	19850915 C1 0028591 A1 1138080 A1 6469886 B1	23-03-2000 18-05-2000 04-10-2001 22-10-2002
US 5208725	A	04-05-1993		NONE	
US 6297524	B1	02-10-2001	CN WO	1411610 T 0175983 A2	16-04-2003 11-10-2001